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Henz

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(54) **FALL-AWAY BRASSIERE**

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(22) Filed: **Jul. 14, 2000**

(51) **Int. Cl.**[7] **A41C 3/00**
(52) **U.S. Cl.** **450/86**; 450/88
(58) **Field of Search** 2/113, 67; 450/1, 450/58, 59, 64, 71, 78, 79, 80, 82, 86, 87, 88, 62, 73, 77, 8, 9, 10, 14, 17, 18, 26, 28; D2/706, 707, 708, 709

(56) **References Cited**

U.S. PATENT DOCUMENTS

525,241	A	*	8/1894	Tucek	
1,878,755	A	*	9/1932	Caldor	
1,926,078	A	*	9/1933	Yonts	2/42
2,055,094	A	*	9/1936	Zweben	2/42
2,134,294	A	*	10/1938	Yerkes	2/42
2,156,478	A	*	5/1939	Kemp	2/42
2,255,720	A	*	9/1941	Lewis	2/42
2,438,210	A	*	3/1948	Gluckin	2/42
2,454,152	A	*	11/1948	Glick	2/42
2,455,036	A	*	11/1948	Boylan	2/42
2,954,031	A		9/1960	Froehlich	128/472
3,008,468	A	*	11/1961	Williams	128/426
3,027,898	A	*	4/1962	Williams	128/510
3,204,638	A		9/1965	Winkler	128/502
3,311,112	A	*	3/1967	Murray	128/425
3,935,865	A	*	2/1976	Newmar	128/488
3,982,547	A	*	9/1976	Walker	128/452
4,418,696	A		12/1983	Delet	128/476
4,957,466	A	*	9/1990	Hopps	450/85
5,024,628	A	*	6/1991	Sanchez	450/36
5,538,502	A	*	7/1996	Johnstone	602/79
5,911,618	A	*	6/1999	Dailey	450/86
6,023,785	A	*	2/2000	Johnson	2/62
6,110,007	A	*	8/2000	Rittmann	450/86
6,155,906	A	*	12/2000	May	450/88
6,179,687	B1	*	1/2001	Lee et al.	450/88
6,186,861	B1	*	2/2001	Flaherty	450/1

* cited by examiner

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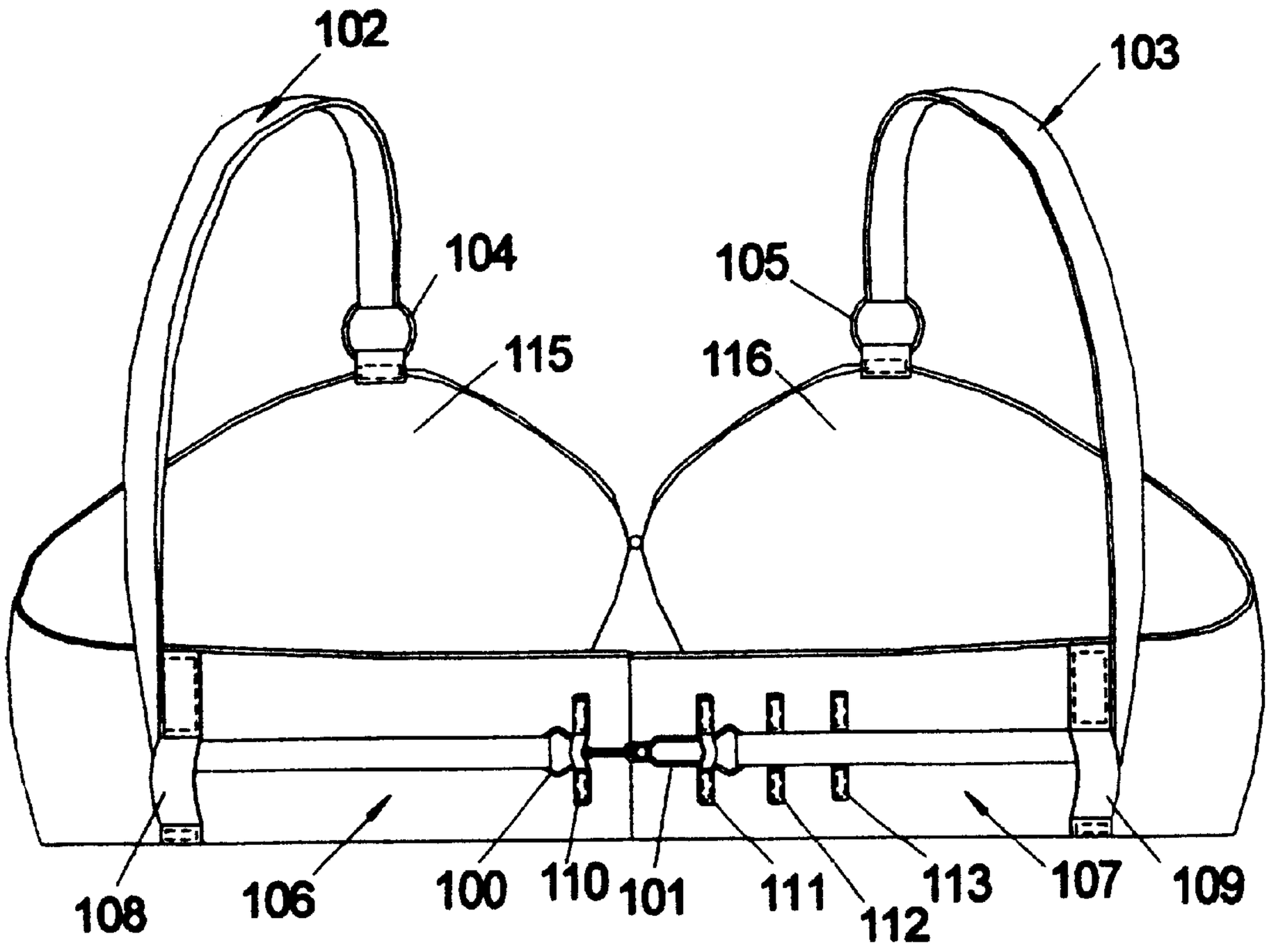
(57) **ABSTRACT**

A full-support brassiere that can be removed without the need to first remove outer garments such as a blouse. The Fall-Away Brassiere is designed with shoulder straps for support and comfort. The release of a single fastener, releases both the back band and the shoulder straps, allowing the brassiere to fall-away from the wearer's body. The wearer can then slip the brassiere out from under her blouse.

10 Claims, 10 Drawing Sheets



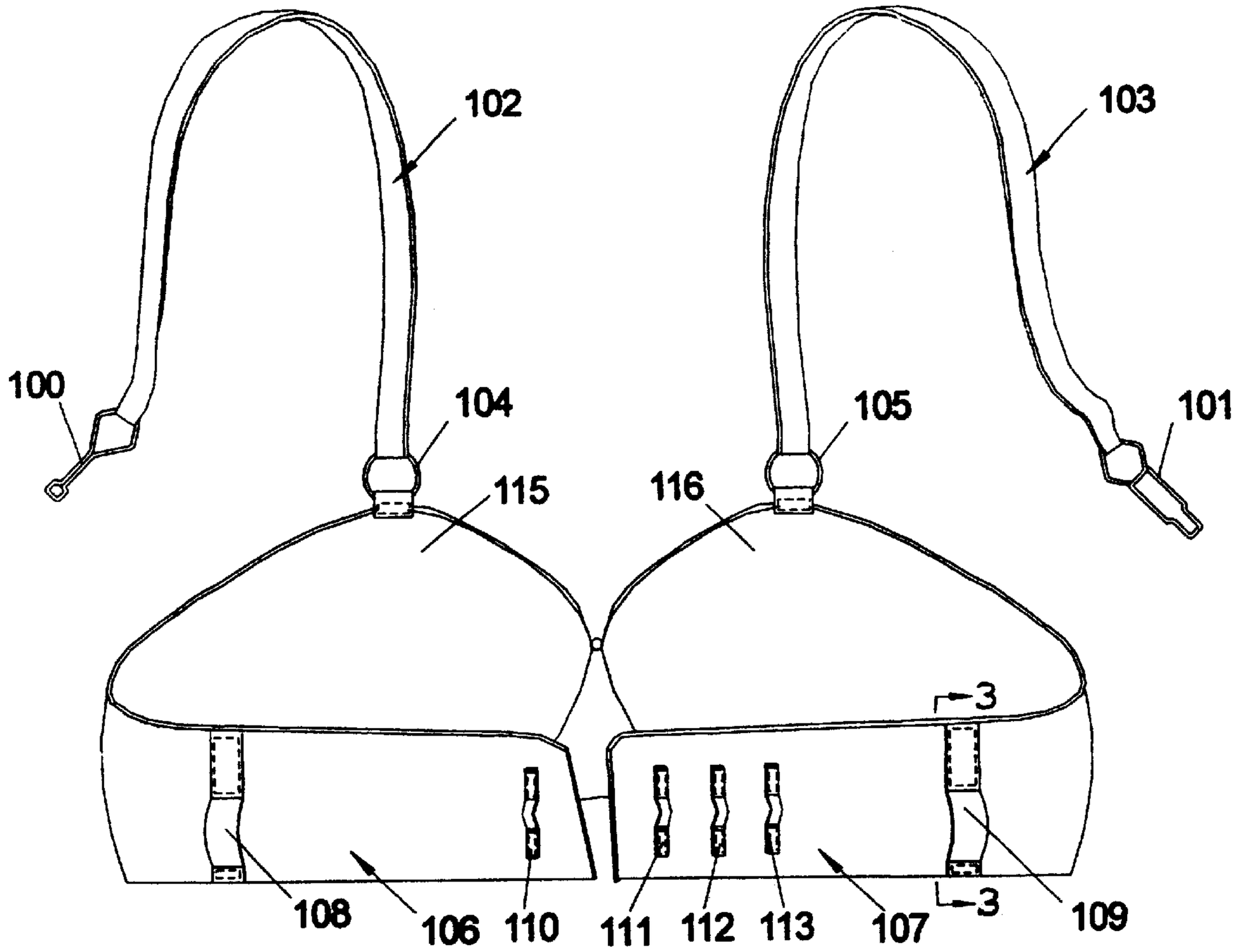

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FIG. 1A

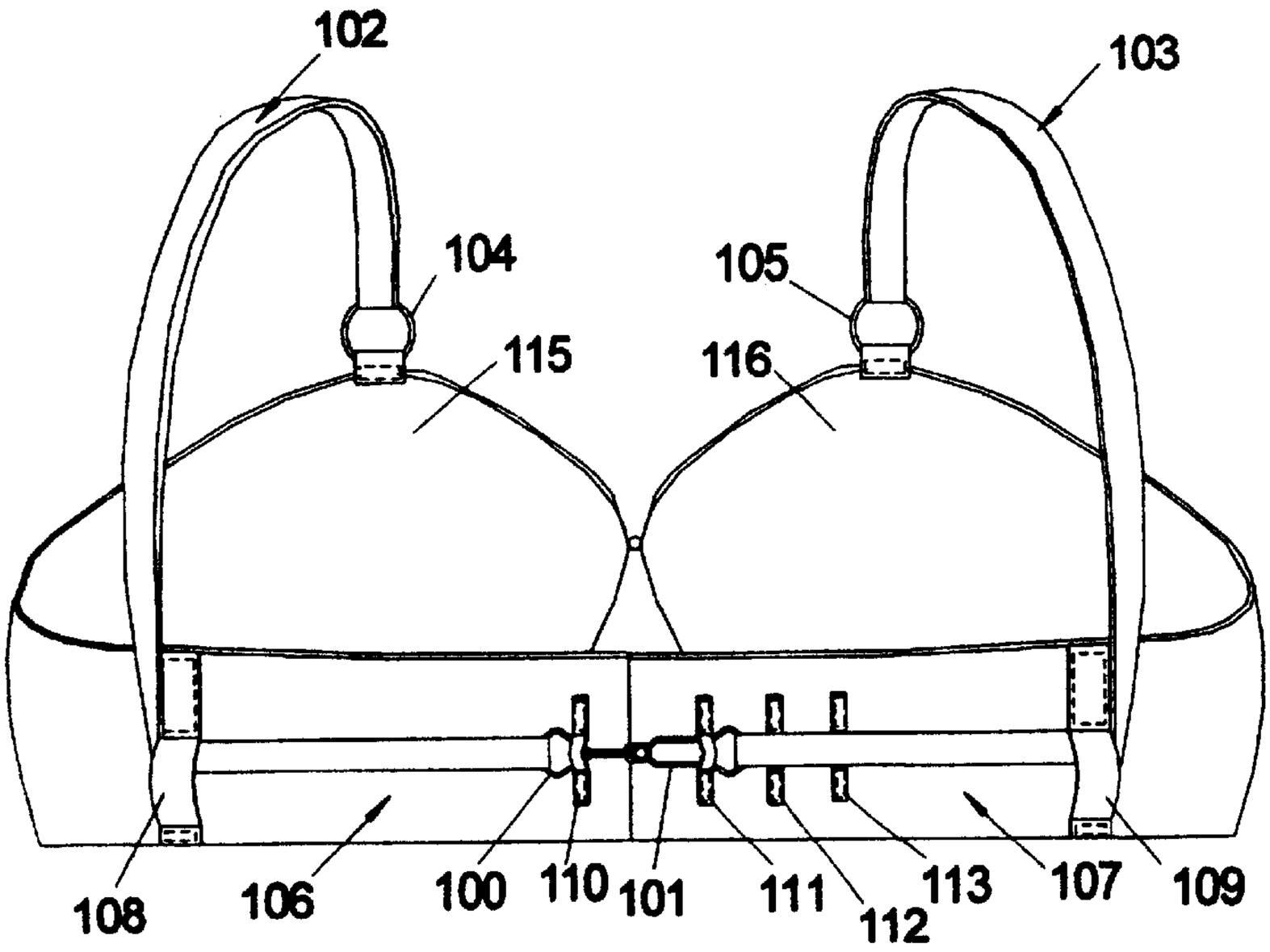
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FIG. 1B

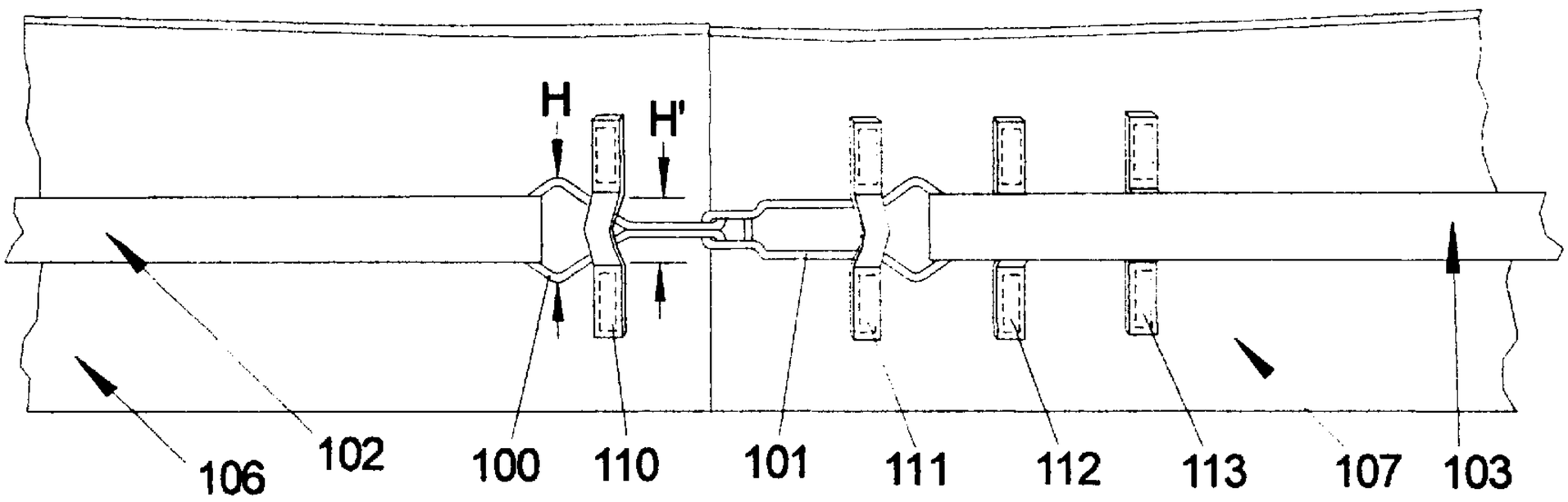

FIG. 2A

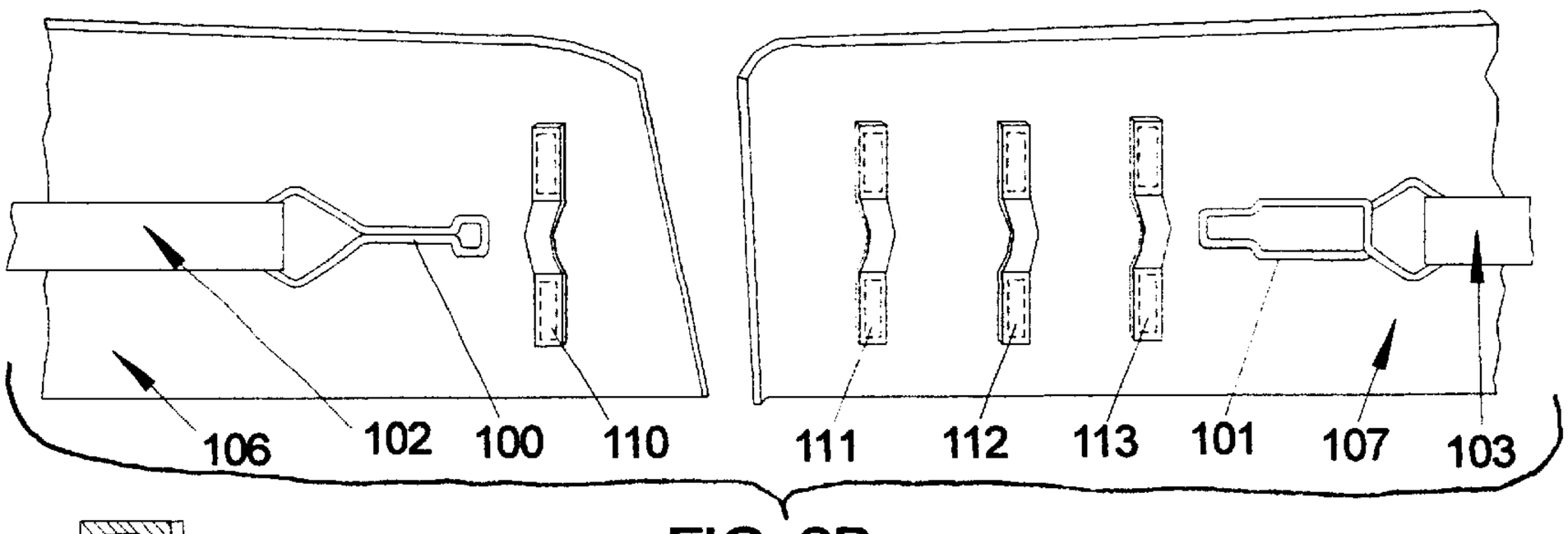

FIG. 2B

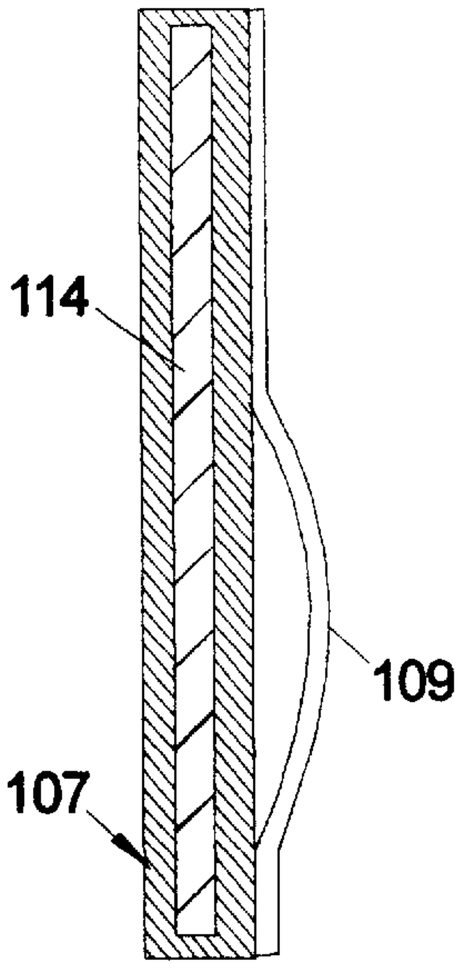

FIG. 3

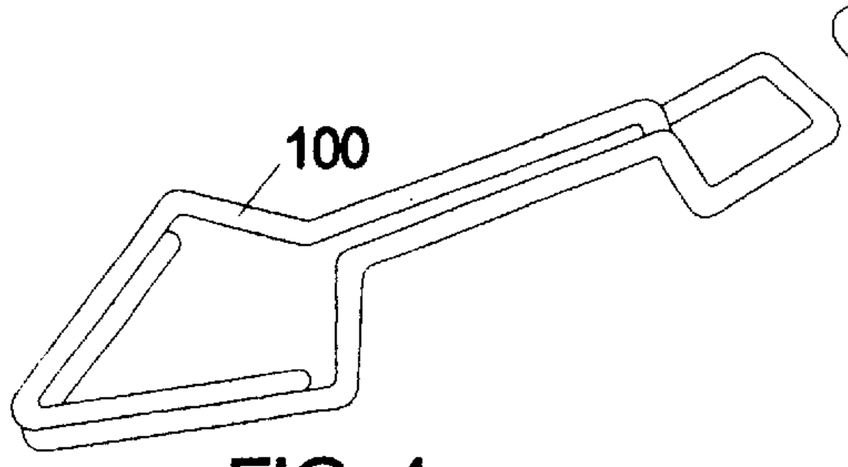

FIG. 4

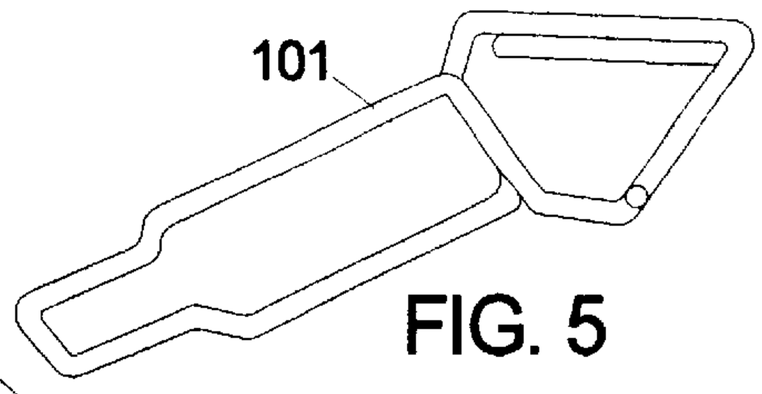

FIG. 5

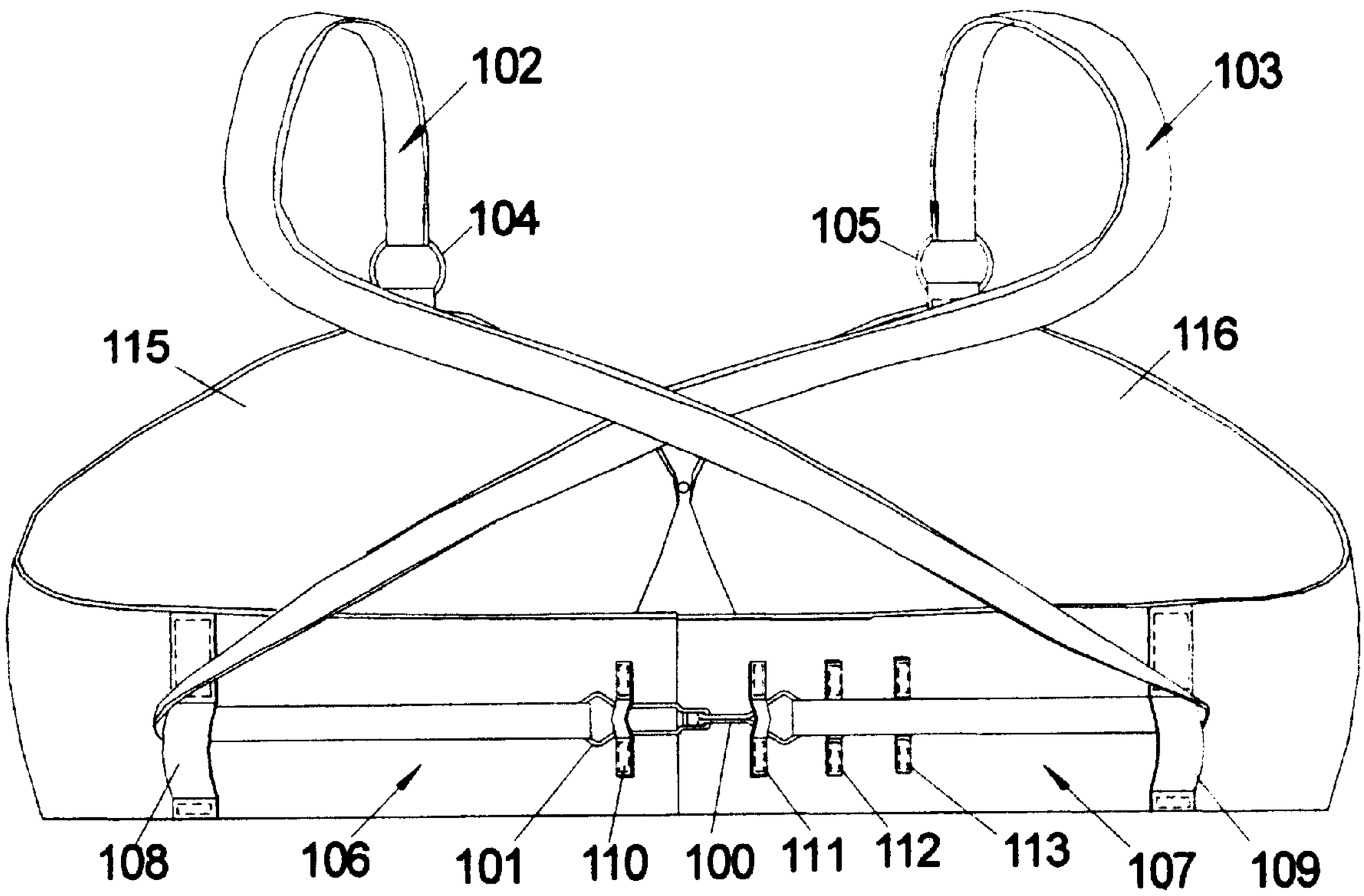

FIG. 6

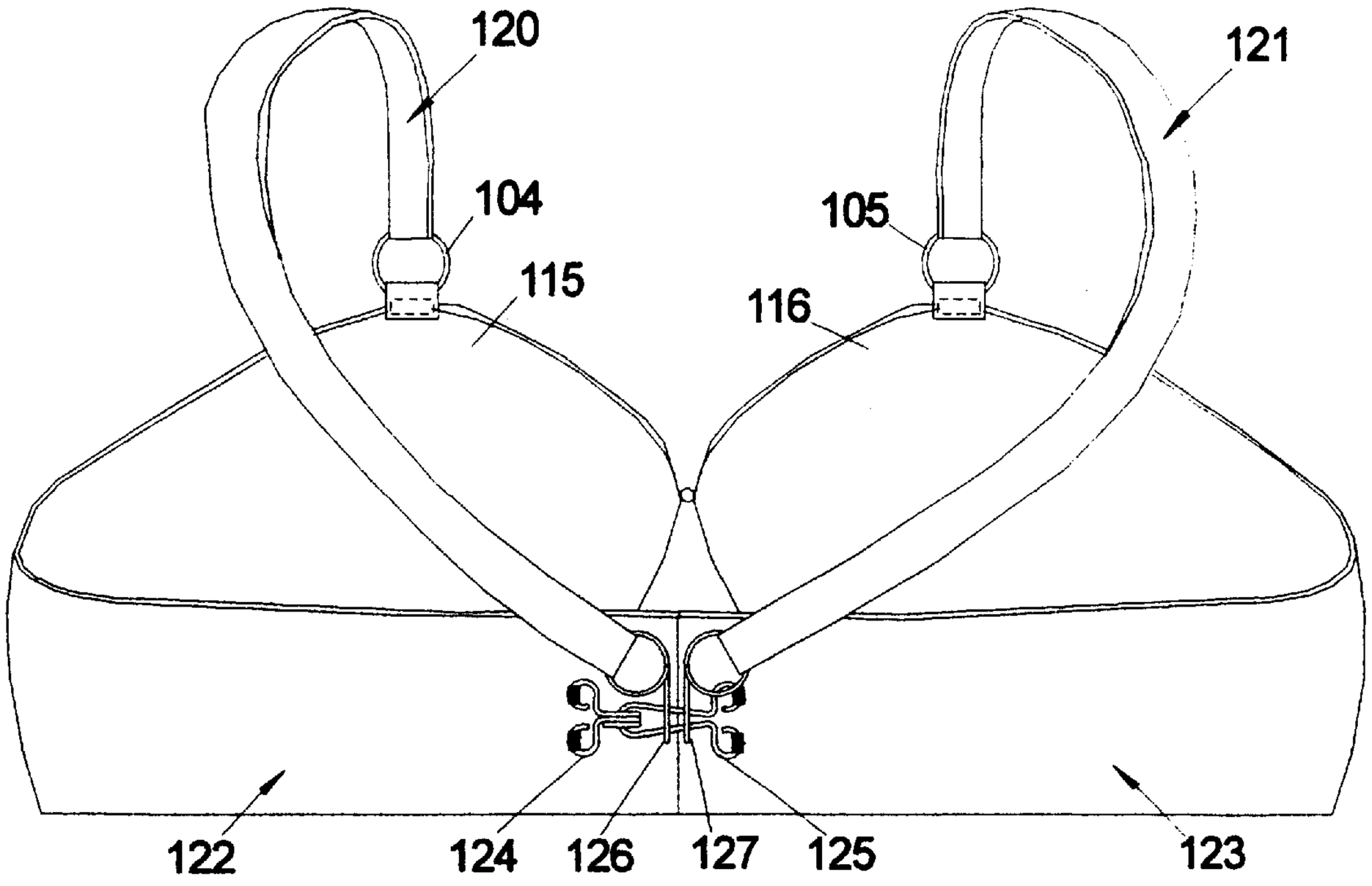
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FIG. 7

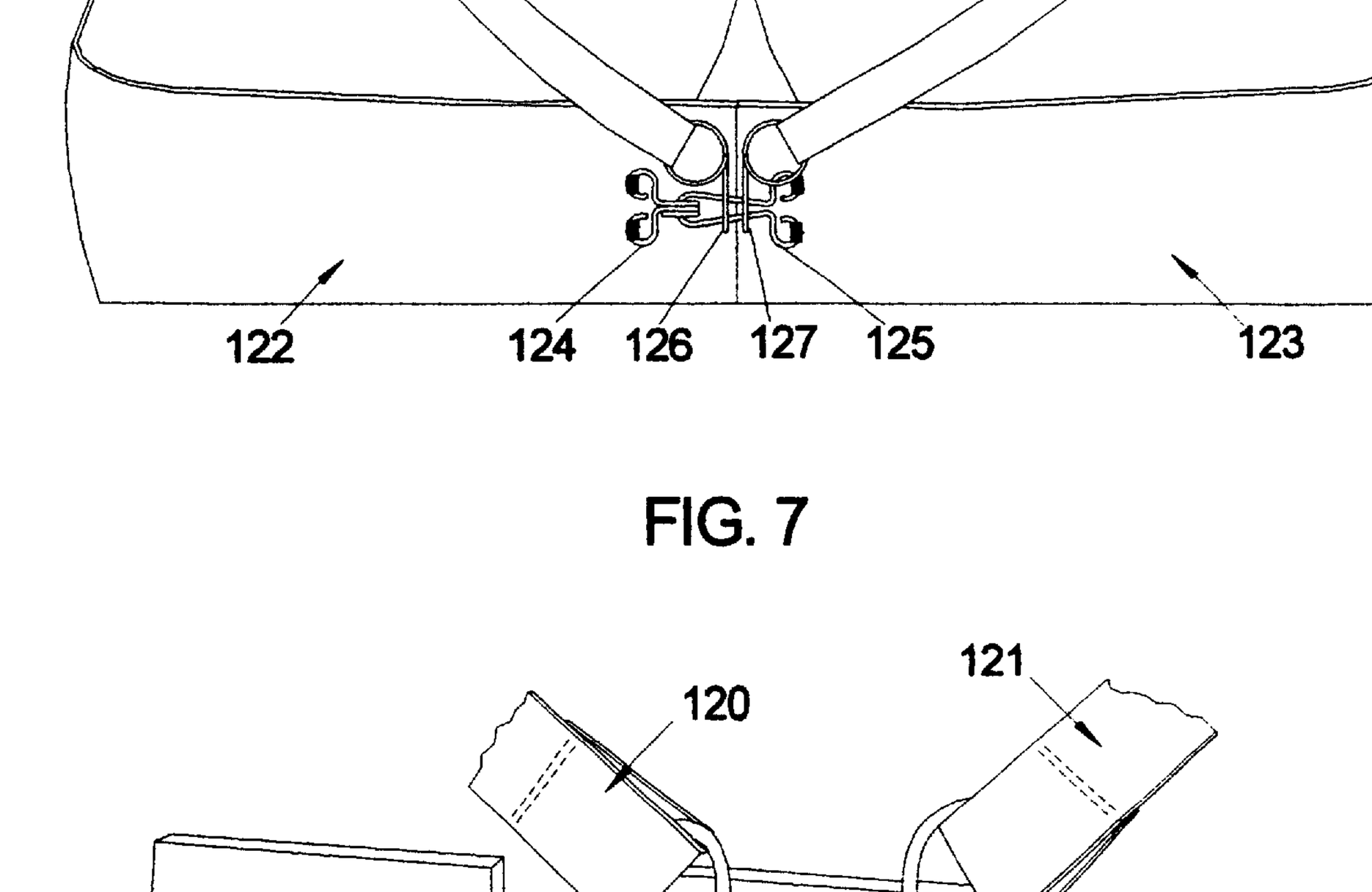
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FIG. 8

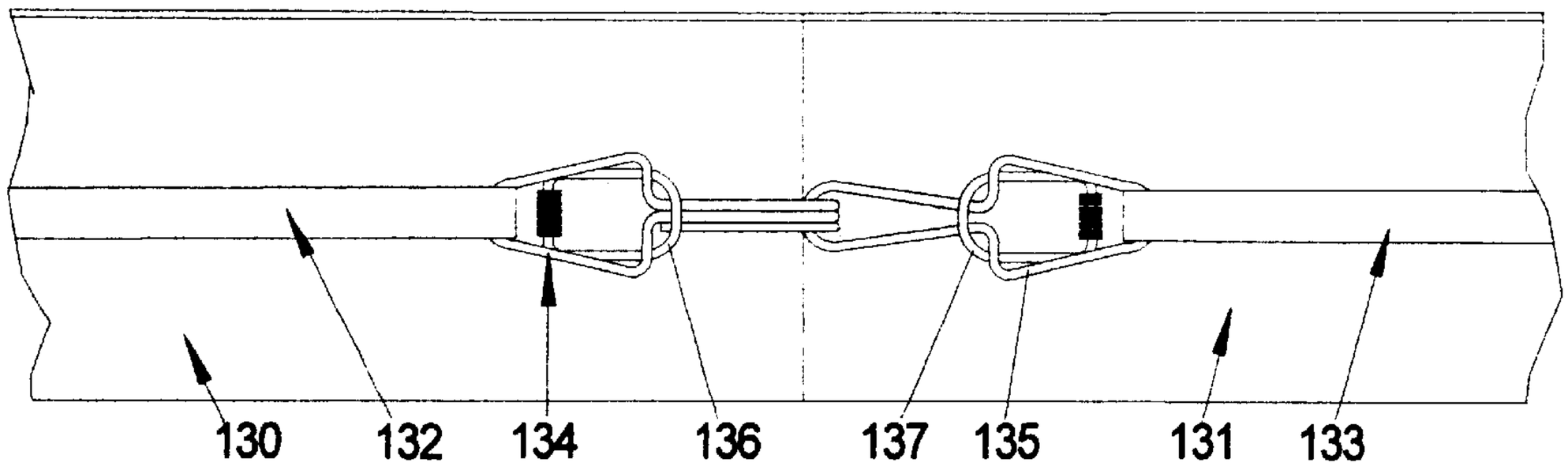

FIG. 9

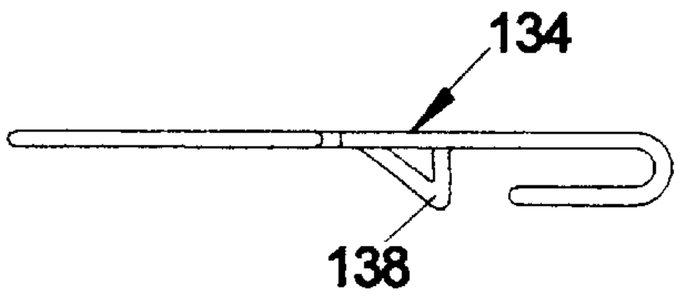

FIG. 10

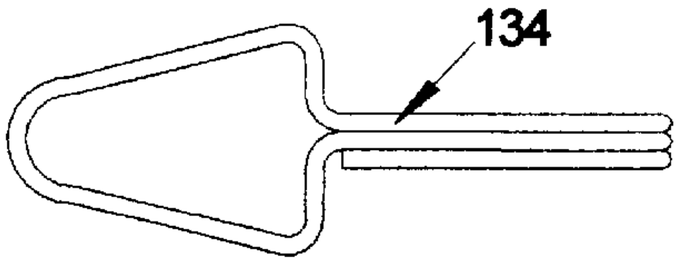

FIG. 11

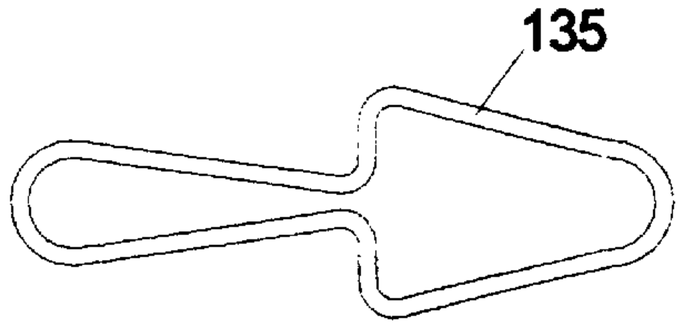

FIG. 12

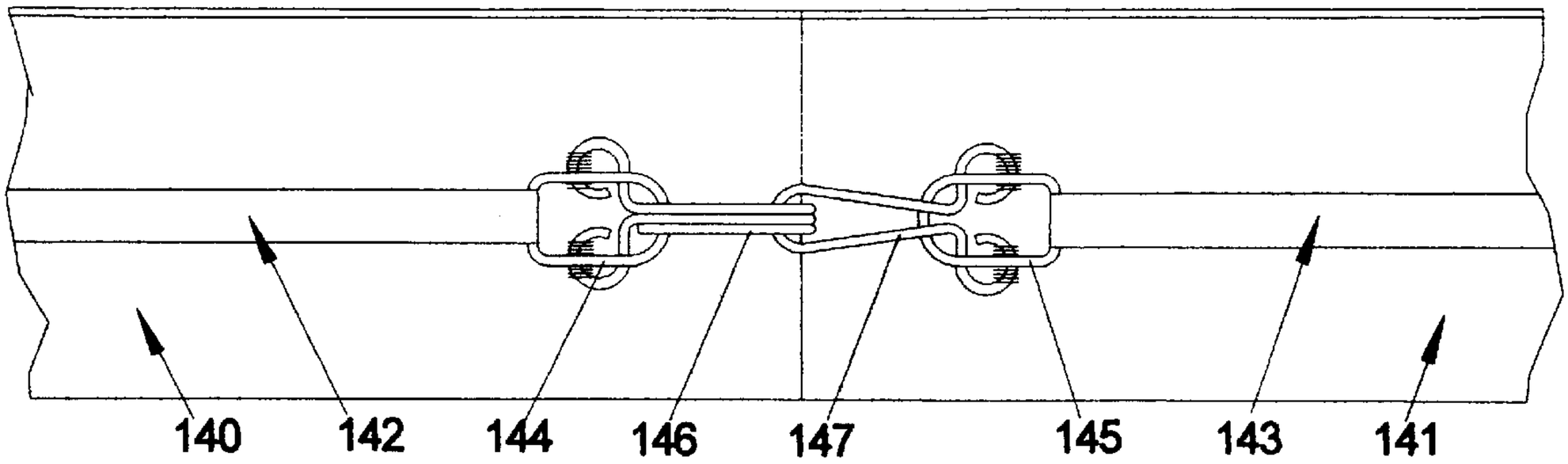

FIG. 13

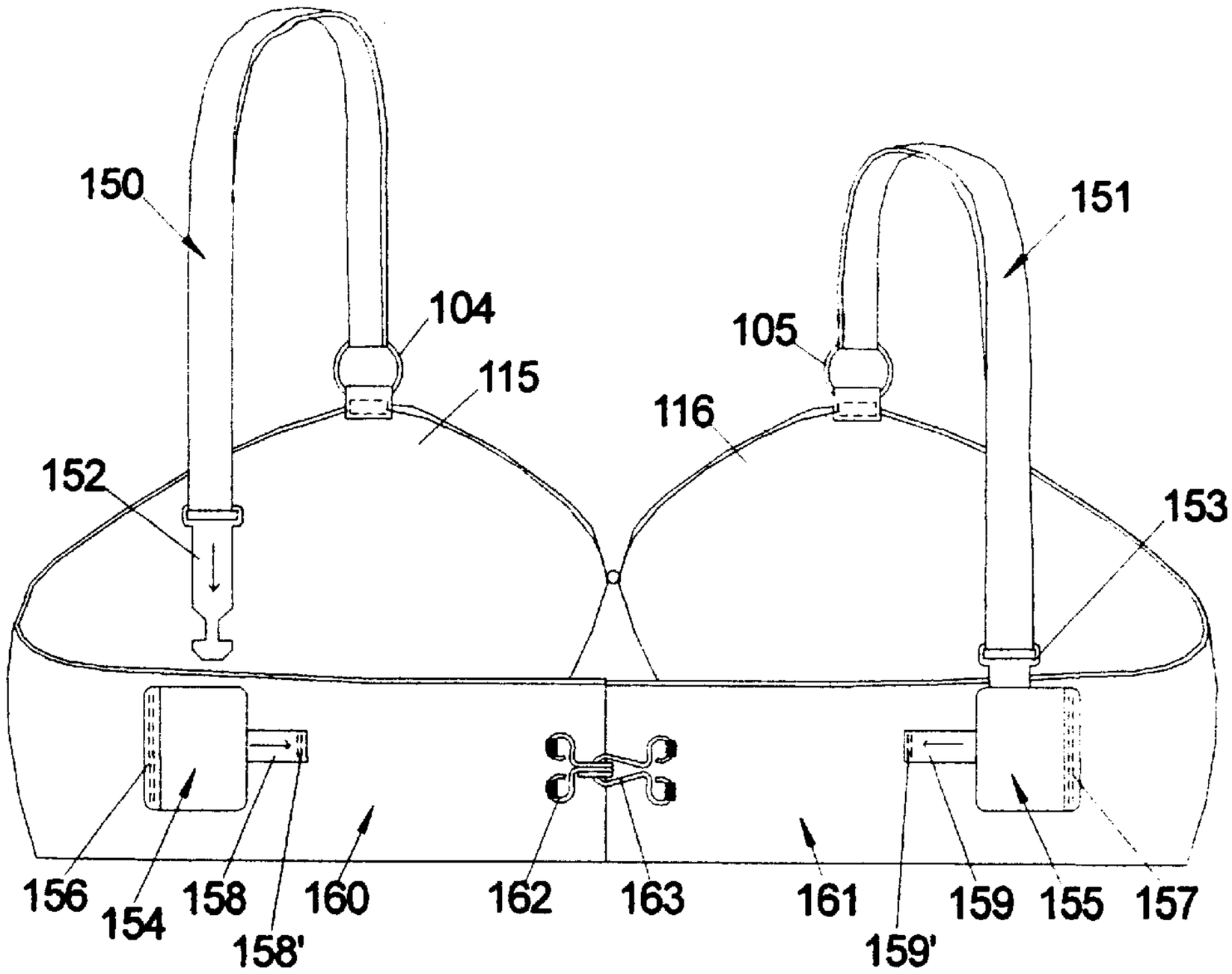

FIG. 14

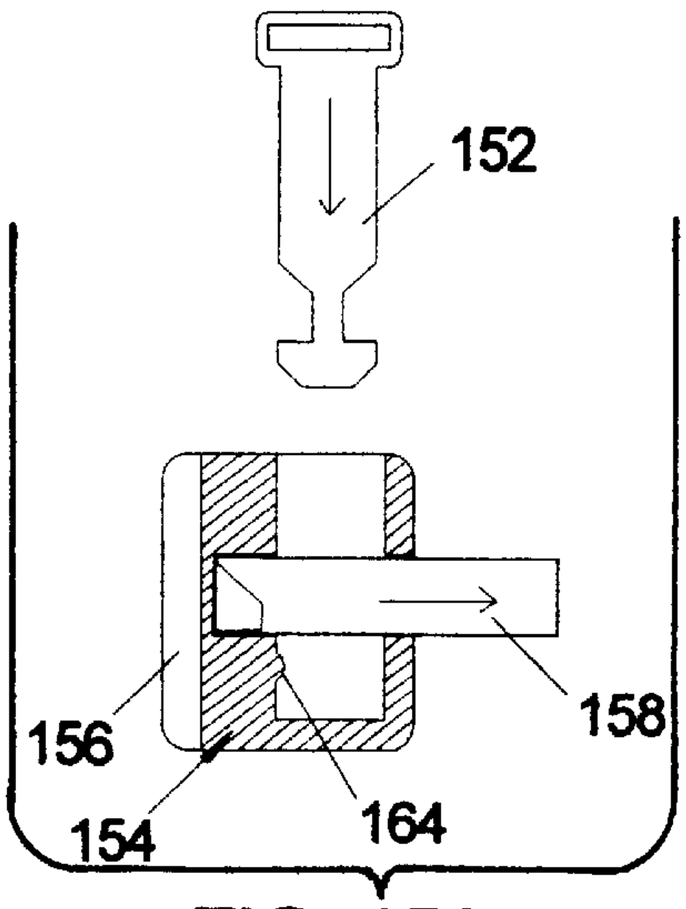

FIG. 15A

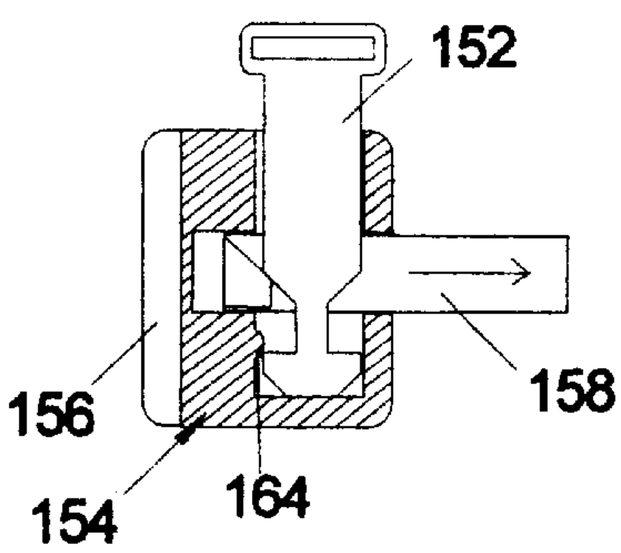

FIG. 15B

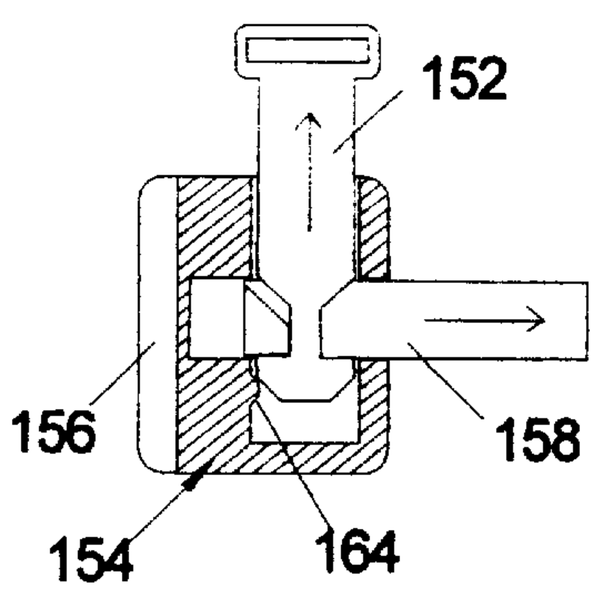

FIG. 15C

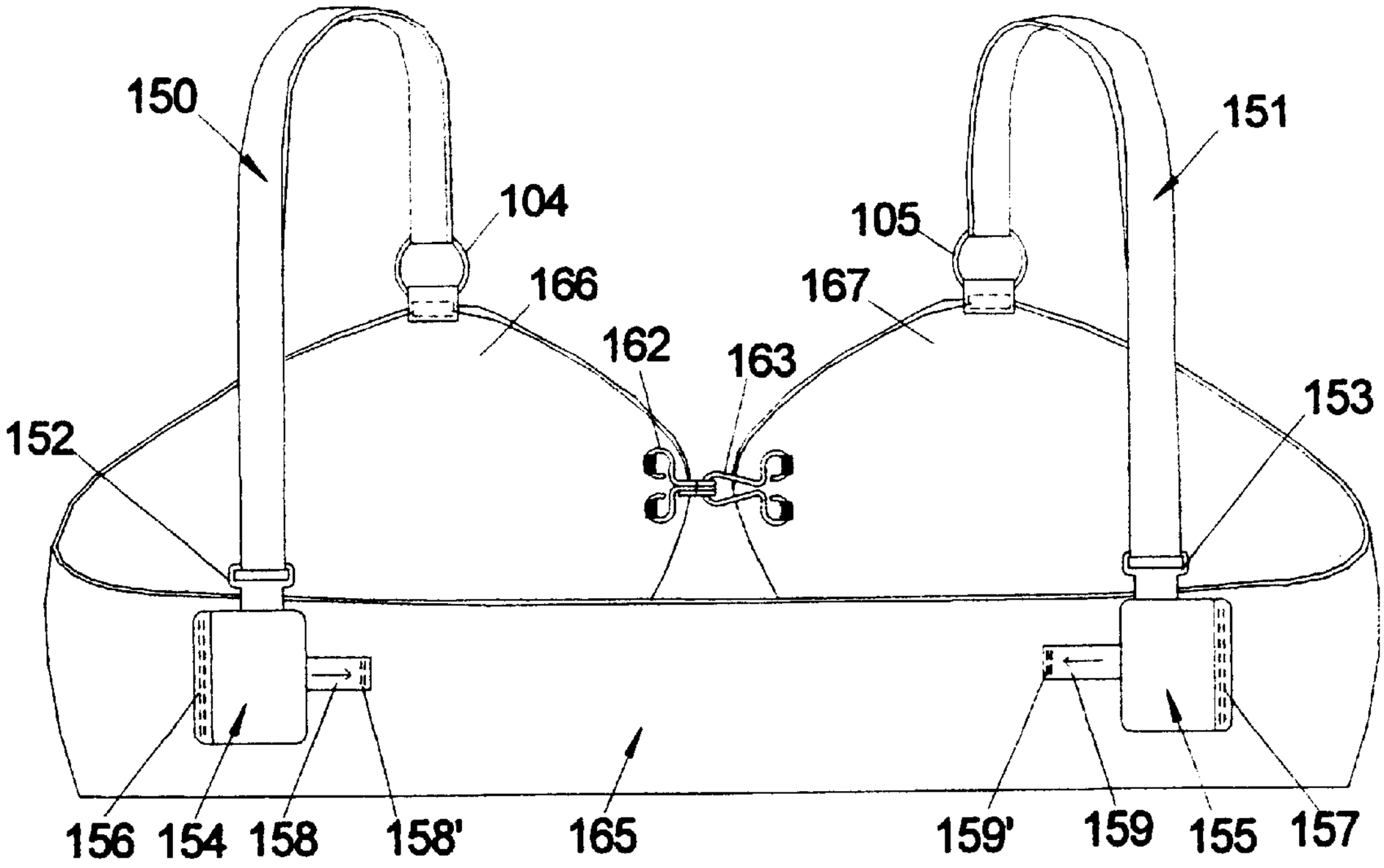

FIG. 16A

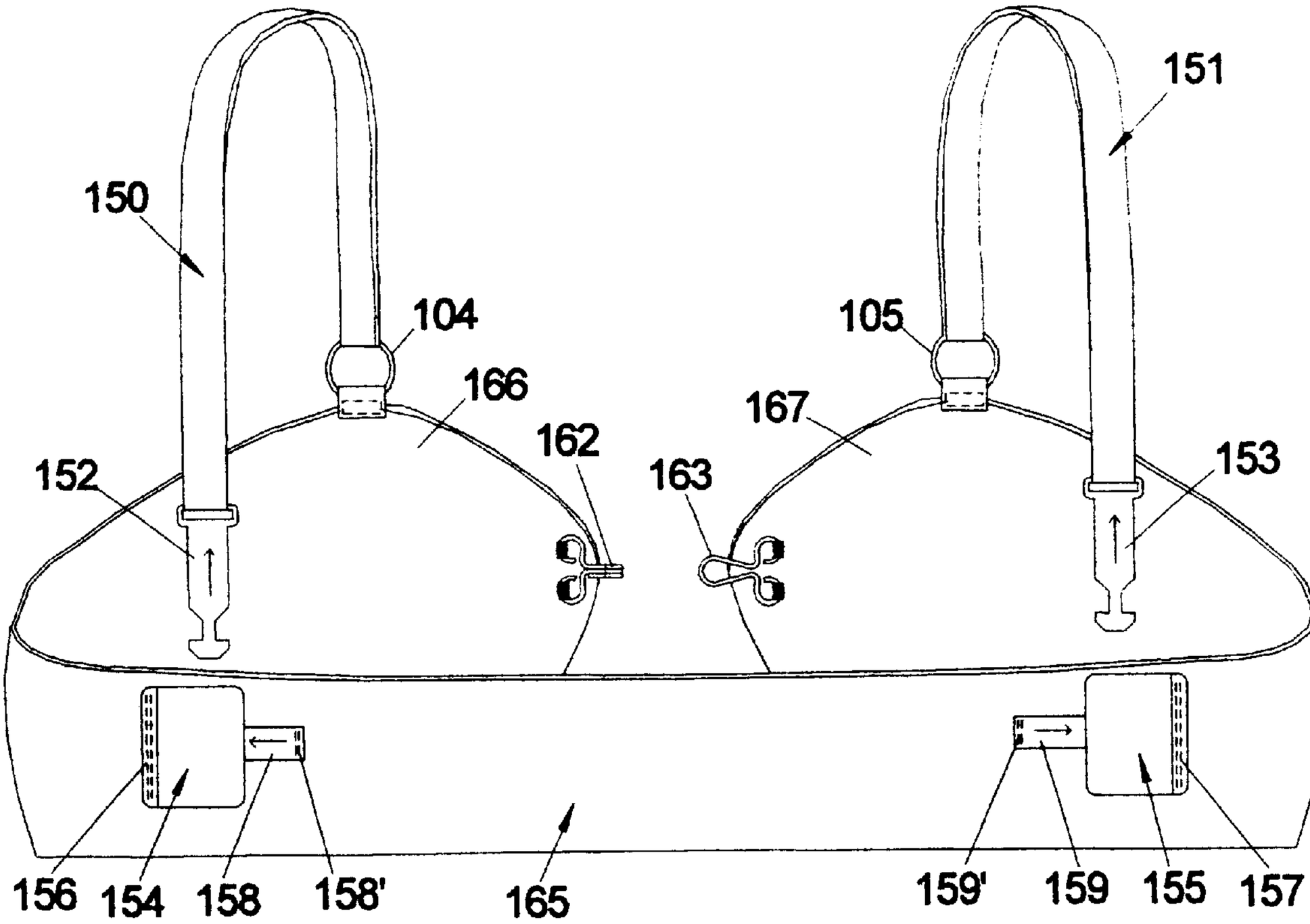

FIG. 16B

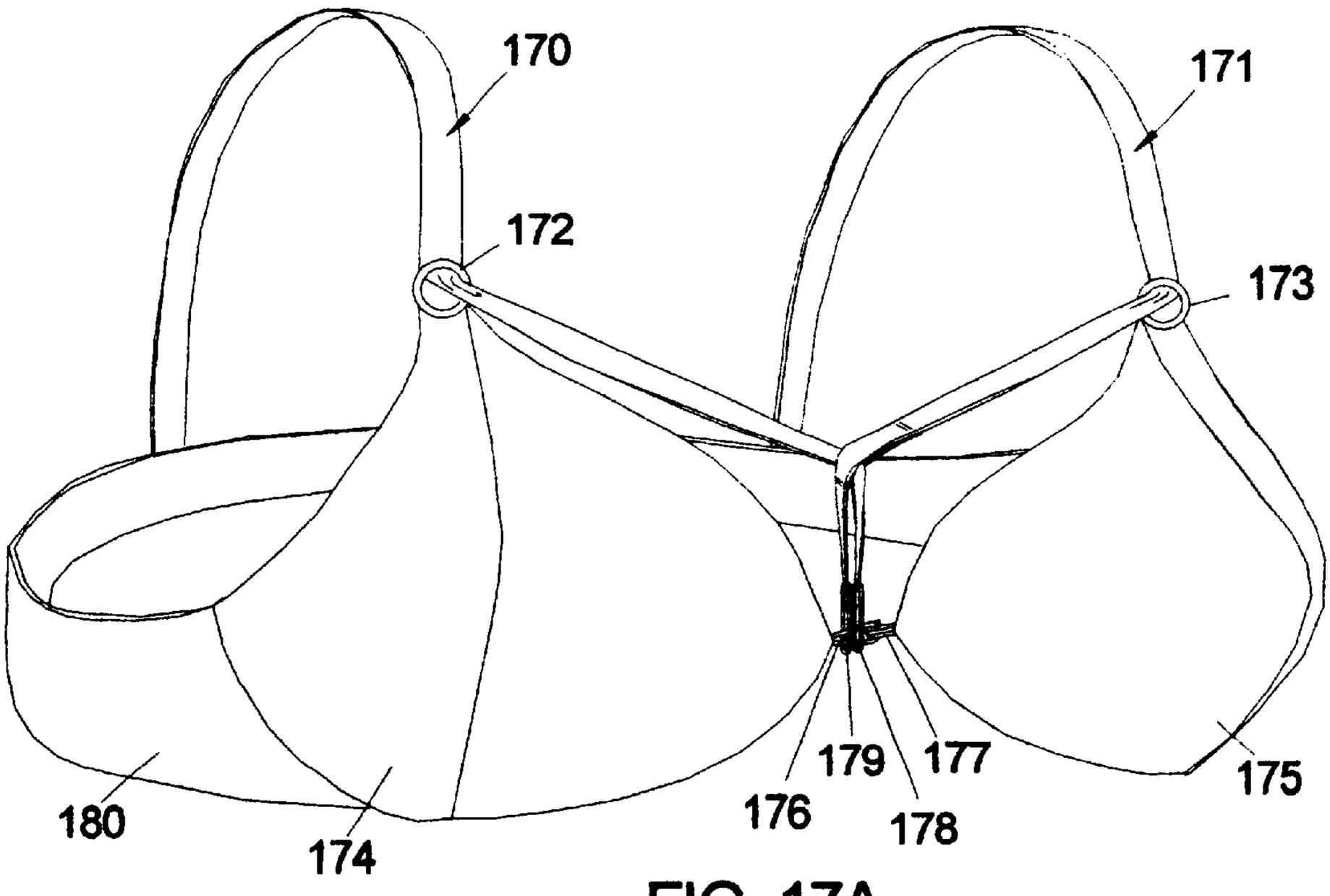

FIG. 17A

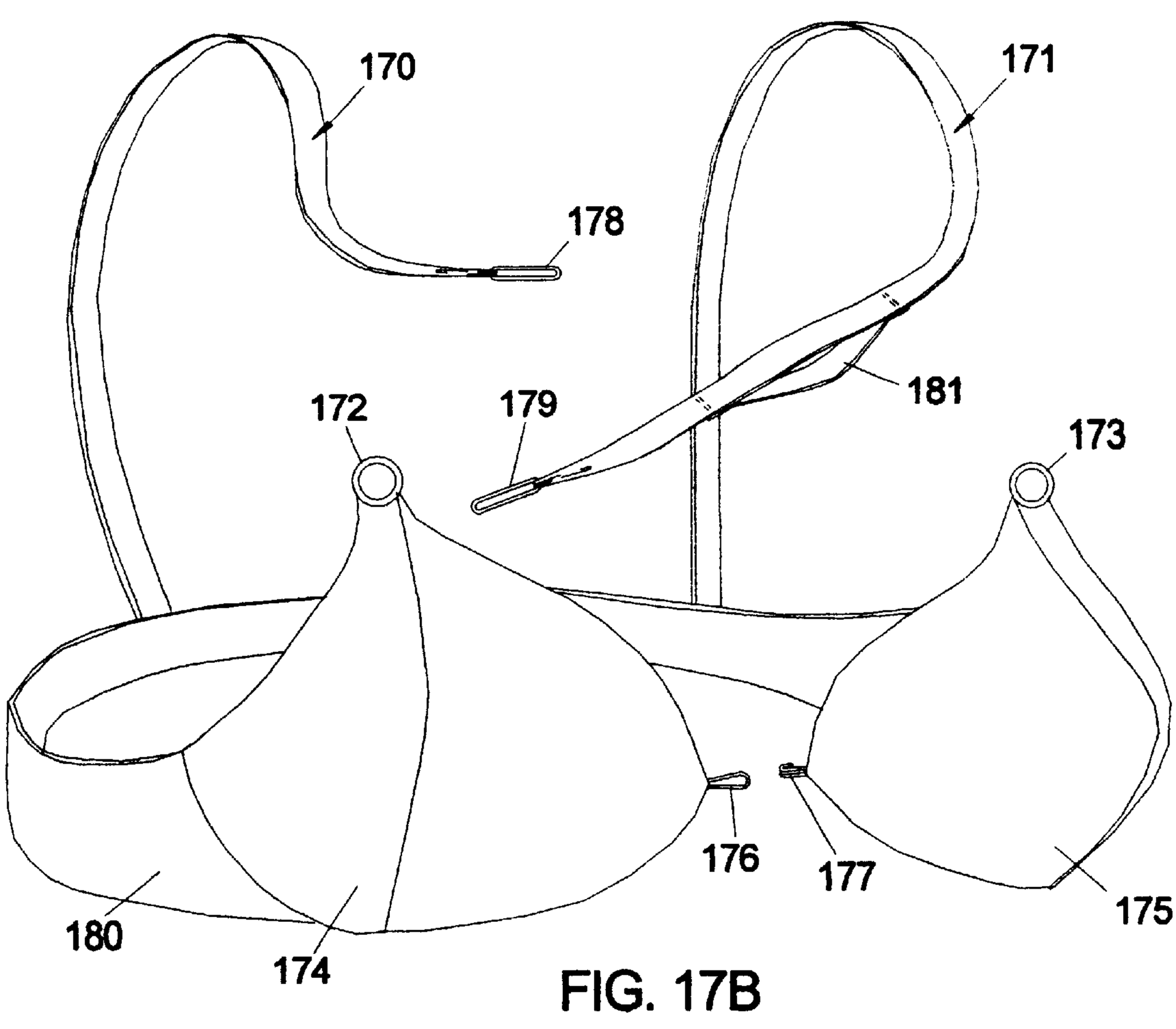

FIG. 17B

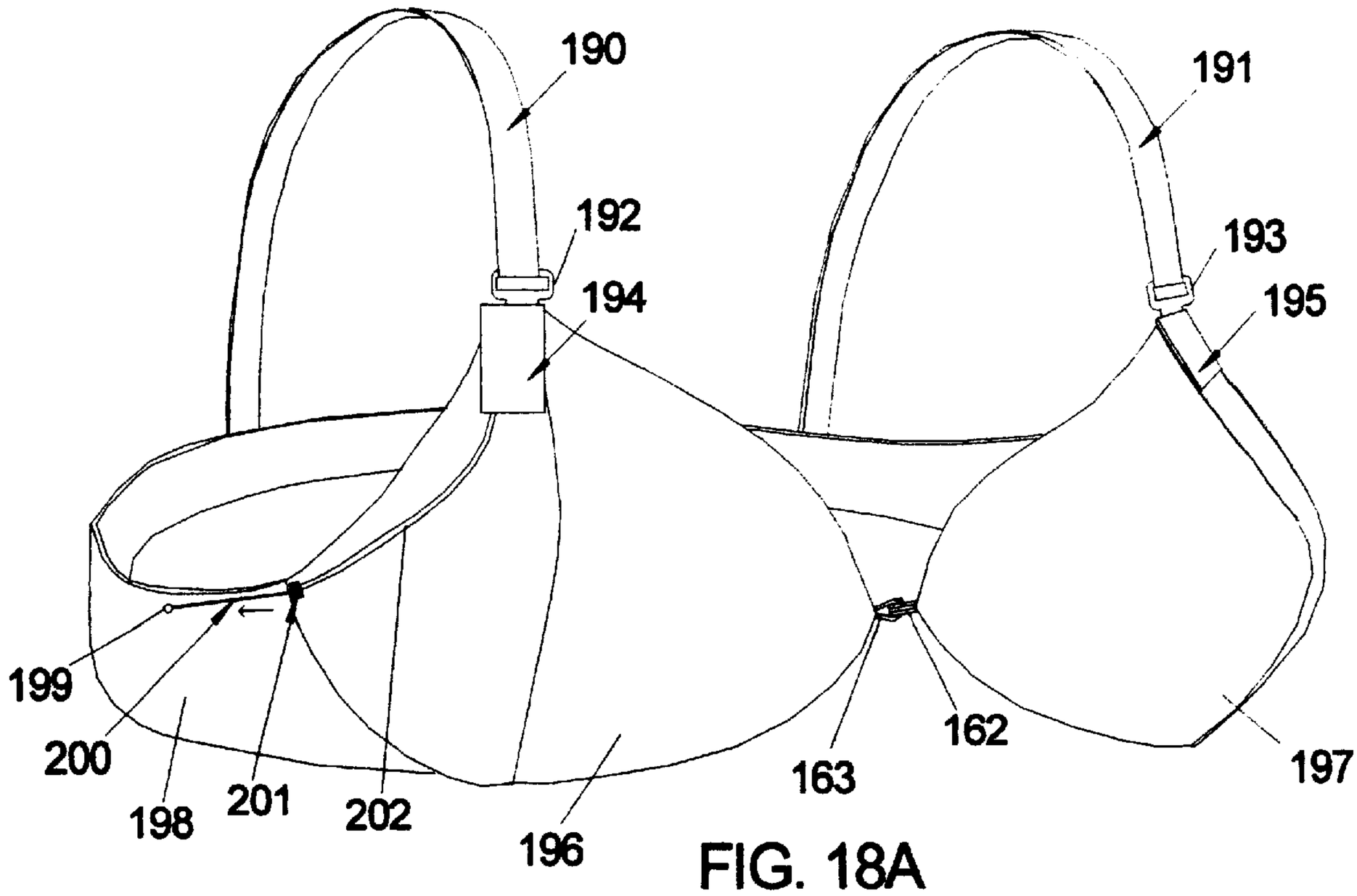

FIG. 18A

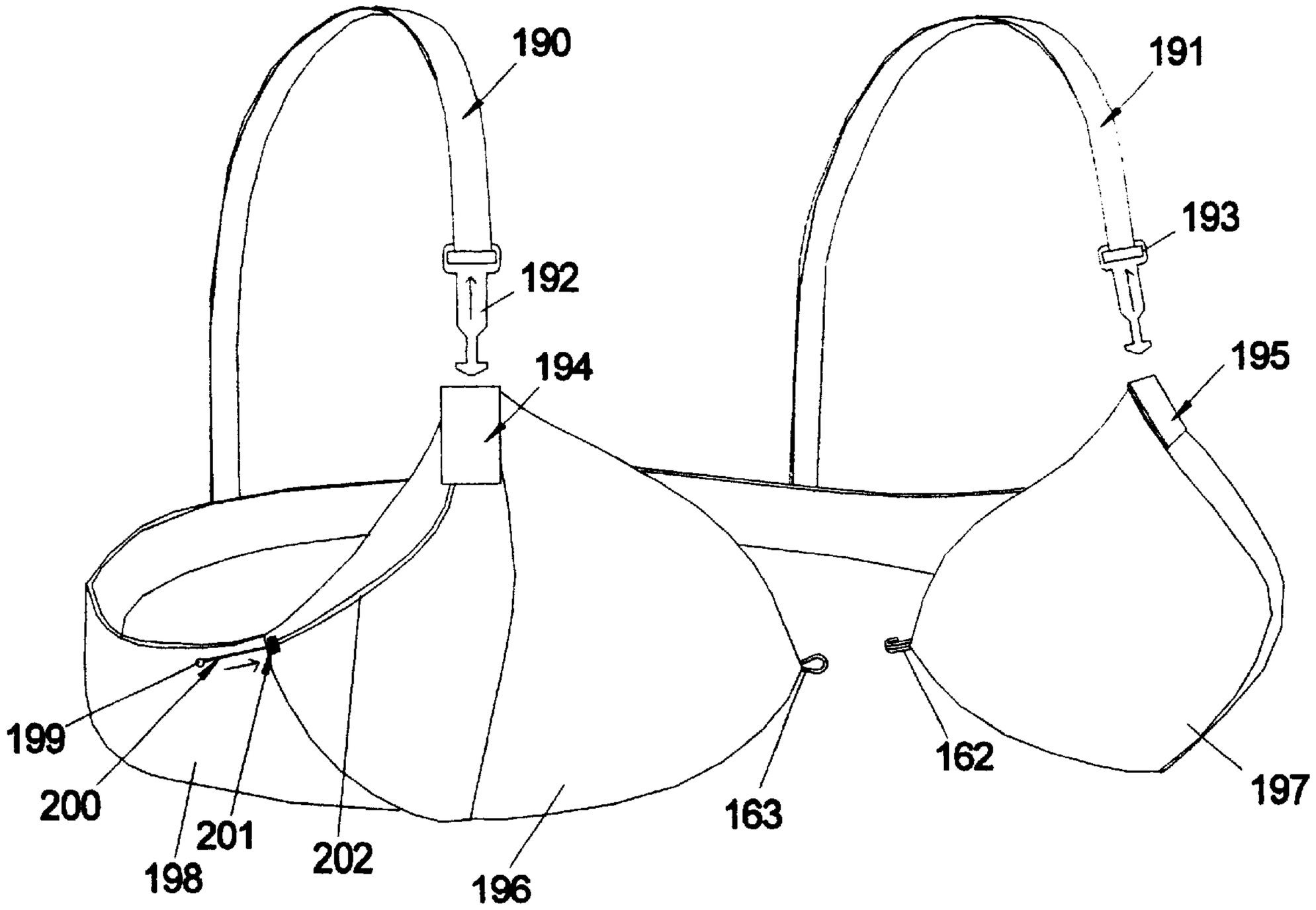

FIG. 18B

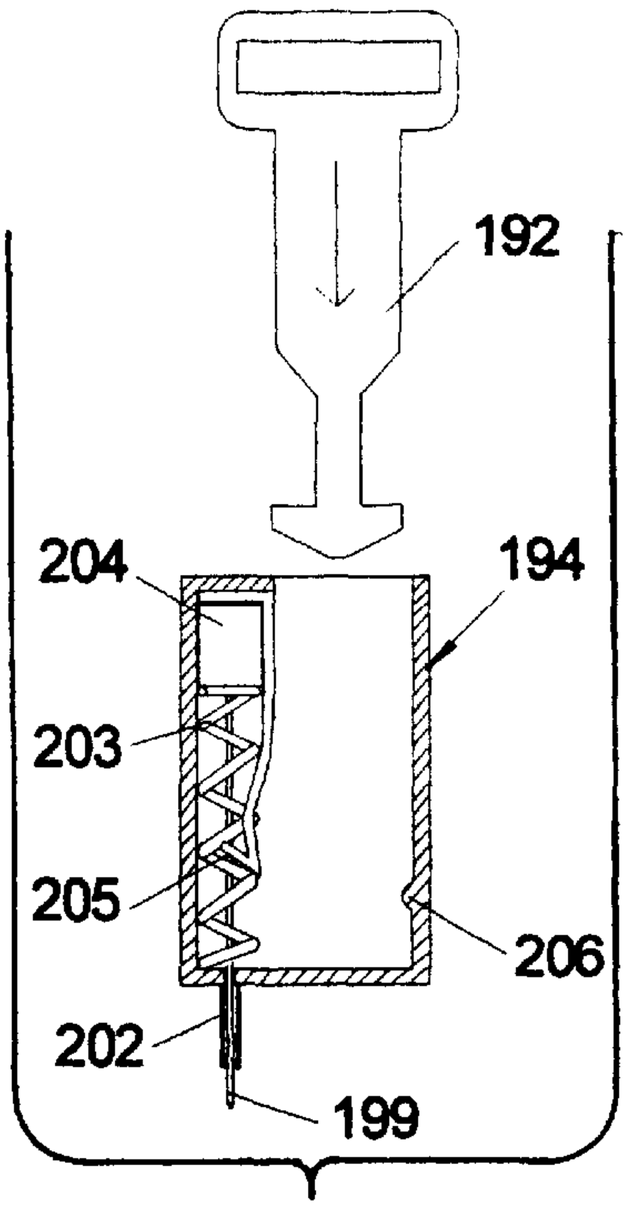

FIG. 19A

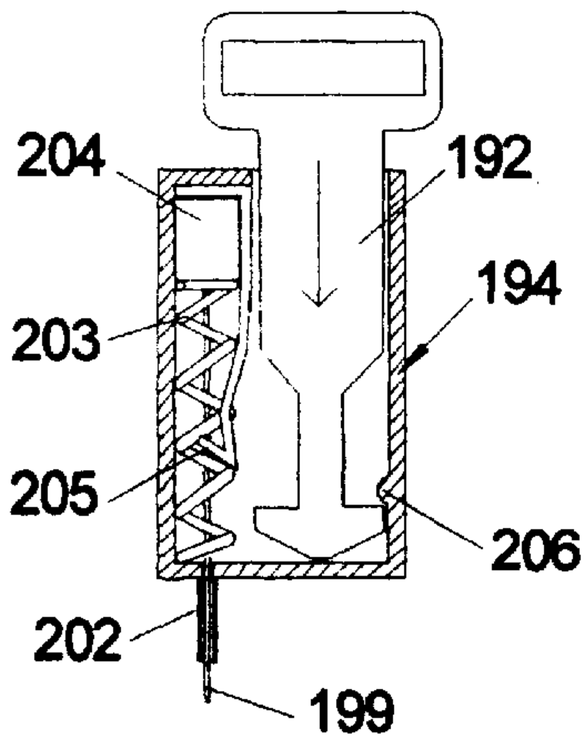

FIG. 19B

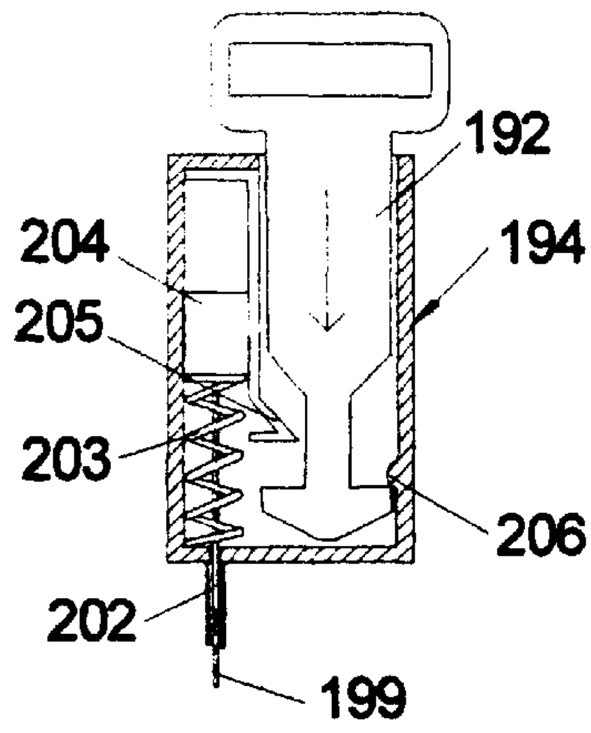

FIG. 19C

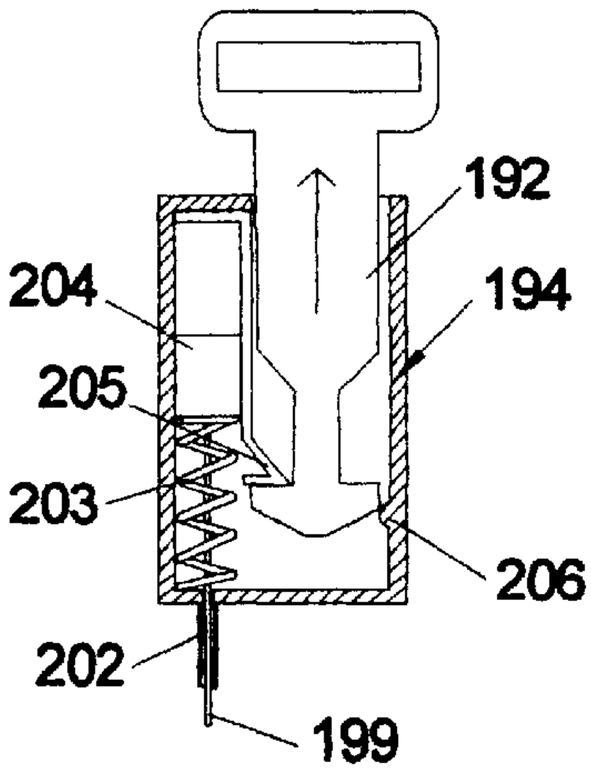

FIG. 19D

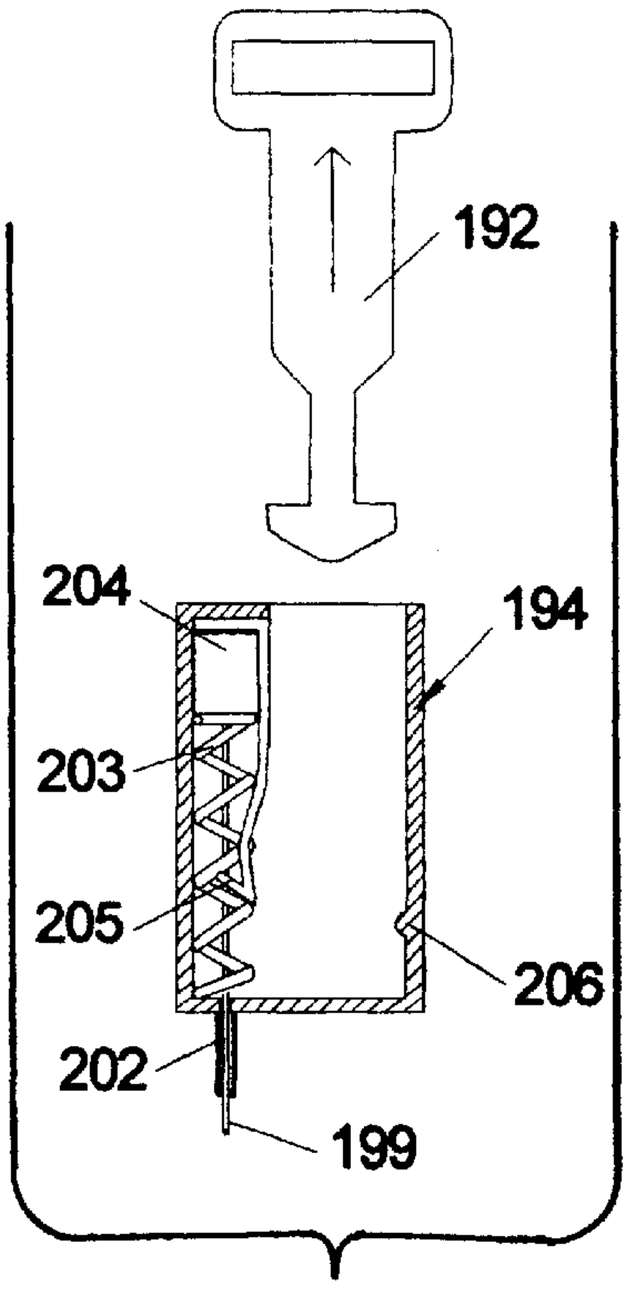

FIG. 19E

FALL-AWAY BRASSIERE

FIELD OF THE INVENTION

The invention relates to brassieres, specifically to the attachment and the release of the shoulder straps and back band.

BACKGROUND OF THE INVENTION

Brassieres are generally worn to provide support for the breast. The full-support brassiere (brassiere with shoulder straps) is designed specifically for this purpose. While the full-support brassiere serves its intended purpose, it is difficult to remove quickly, either for practical purposes or in moments of passion, and nearly impossible to remove without first removing the outer garments.

Several prior inventions have attempted to address this limitation. U.S. Pat. No. 2,954,031 to Froehlich describes a front-opening strapless brassiere. While the front-opening strapless brassiere described by Froelich can be removed quickly without the need to first remove outer garments, the strapless brassiere does not provide the same level of support and comfort found in brassieres with shoulder straps. Likewise, U.S. Pat. No. 4,418,696 to Delet describes a backless brassiere for use with low cut dresses. The Delet invention does not solve the removal issue, since the backless brassiere described still employs shoulder straps. Rapid removal of the brassiere described by Delet would still be problematic, and require the removal of outer garments to slide the brassiere off the shoulders. U.S. Pat. No. 3,204,638 to Winkler describes a backless-strapless brassiere. While removal may be simple, the backless-strapless brassiere provides inadequate support, and is generally reserved for formal dresses with both low cut backs and exposed shoulders.

The desire for a full support brassiere that can be quickly and easily removed is evidenced by the popularity of the front-opening brassiere. However, as with any full-support brassiere commercially available that employs shoulder straps, the front-opening brassiere can not be removed from the shoulders without first removing the outer garments.

SUMMARY OF THE INVENTION

Accordingly, objects and advantages of the present invention are:

(a) to provide a full-support brassiere that employs shoulder straps for comfort and support; and

(b) to provide a full-support brassiere that can be quickly and simply removed without the necessity of first removing the outer garment such as a blouse.

Further objects and advantages of the invention will become apparent through consideration of the drawings and ensuing description.

Unlike the prior art, which sacrificed function for form or visa versa, the Fall-Away Brassiere disclosed below incorporates both comfort and support with ease of removal. The use of either a common attachment point for both the back band and the shoulder straps, or a remote coupling device for the shoulder straps that releases when the back band is unfastened, makes this possible.

BRIEF DESCRIPTION OF THE DRAWINGS

FIGS. **1**A and **1**B show perspective views of the rear-opening Fall-Away Brassiere of the invention in the unfastened and fastened conditions respectively.

FIGS. **2**A and **2**B show an enlarged, fragmentary, detailed view of the back bands and shoulder straps for the rear-opening Fall-Away Brassiere in the fastened and unfastened conditions respectively.

FIG. **3** is a sectional view, indicated by the section lines **3**—**3** in FIG. **1**A, of the back band for the rear-opening Fall-Away Brassiere showing the rigid member that spans the back band to prevent bunching of the back band.

FIG. **4** is an enlarged perspective view that shows the detail for a low-snag hook for use with the rear-opening Fall-Away Brassiere.

FIG. **5** is a perspective view that shows the detail for a low-snag eye for use in conjunction with the low-snag hook of FIG. **4** with the rear-opening Fall-Away Brassiere.

FIG. **6** shows a perspective view of an alternative cross-over strap arrangement for the rear-opening Fall-Away Brassiere.

FIG. **7** shows a perspective view of an alternative rear strap arrangement with the shoulder straps connecting directly to the closure in the center of the back band.

FIG. **8** shows an enlarged, fragmentary, detail view of the closure for the alternative rear strap arrangement shown in FIG. **7** with the shoulder straps connecting directly to the closure in the center of the back band.

FIG. **9** is an enlarged, fragmentary detail view showing the use of rigid rings in a back closure arrangement.

FIG. **10** shows a side view of a hook employing an anti-snag feature.

FIG. **11** shows a plan view of an alternative hook employing an anti-snag feature.

FIG. **12** shows a plan view of an eye for use with the hook of FIG. **11** and employing an anti-snag feature.

FIG. **13** is an enlarged, fragmentary, detail view showing an alternative arrangement with hook and eye fasteners sewn to the back band and rings attached to the ends of the shoulder straps.

FIG. **14** shows an alternative rear-opening Fall-Away Brassiere that relies on tension in the back band to release the shoulder straps.

FIGS. **15**A through **15**C show the latch box detail in various states.

FIGS. **16**A and **16**B show a front-opening Fall-Away Brassiere in the fastened and unfastened conditions respectively that relies on tension in the back band to release the shoulder straps.

FIGS. **17**A and **17**B show perspective views of a front-opening Fall-Away Brassiere. in the fastened and unfastened conditions respectively.

FIGS. **18**A and **18**B show perspective views of a front-opening Fall-Away Brassiere that relies on a remote release device to release the front of the shoulder straps.

FIGS. **19**A through **19**E show detailed drawings of the remote release mechanism in various states of operation.

DETAILED DESCRIPTION OF INVENTION

The preferred embodiment of the rear-opening Fall-Away Brassiere is illustrated in FIG. **1**A (unfastened view) and FIG. **1**B (fastened view). The Fall-Away Brassiere has two shoulder strap assemblies **102** and **103** connected at one end to the top of their respective breast receptor cups **115** and **116** by rings **104** and **105**. Shoulder strap assembly **102** has a low-snag hook **100** sewn to its opposite end. Shoulder strap assembly **103** has a low-snag eye **101** sewn to its opposite end. The term "low-snag" is used herein to describe closure units formed as fully closed shapes so as not to damage fabrics. As will be evident to those skilled in the art,

the shoulder straps are intended to be provided with means to adjust their lengths, although not illustrated as such.

Back bands **106** and **107** are sewn respectively to the outer edges of breast receptor cups **115** and **116** and are designed to fit around the wearer's back and fasten behind. Two cloth loops **108** and **109** are sewn to the back bands at the point where shoulder straps on a conventional full-support brassiere attach to the back bands. A cloth loop **110** is sewn to the end of back band **106**. Cloth loops **111, 112**, and **113** are sewn to the end of back band **107**.

FIG. **2**A (fastened view) and FIG. **2**B (unfastened view) show the detail of shoulder strap assemblies **102** and **103** as each engages back bands **106** and **107** respectively and connect to each other at a common point. In order to prevent low-snag hook **100** from passing through cloth loop **110** when being pulled to connect to low-snag loop **101**, the height H of the wide end of low-snag hook **100** is significantly greater than the open portion height H' of cloth loop **110**. A similar relationship exists between low-snag hook **100** and cloth hooks **111, 112**, and **113**. FIG. **2**B shows how low-snag hook **100** and low-snag eye **101** are free to slide out of cloth loops **110** and **111, 112**, or **113** respectively when unfastened from each other.

FIG. **3** shows section **3—3** called out in FIG. **1**A of back band **107**. A rigid or semi-rigid member **114**, designed to prevent back band **107** from bunching up from the tension on cloth loop **109**, is stitched into back band **107** directly under cloth loop **109**. Back band **106** has an identical rigid member to rigid member **114** (not shown).

FIG. **4** shows an enlarged, detailed, perspective view of low-snag hook **100**.

FIG. **5** shows an enlarged, detailed, perspective view of the low-snag eye **101**.

FIG. **6** illustrates an alternative manner of wearing the Fall-Away Brassiere described in respect to FIGS. **1**A, **1**B, **2**A, and **2**B with shoulder strap assemblies **102** and **103** crossed in the back.

FIG. **7** and FIG. **8** illustrate a brassiere employing the conventional front shoulder strap arrangement with shoulder strap assemblies **120** and **121** attached to the top of their respective breast receptor cups **115** and **116** by rings **104** and **105** respectively. Two rings **126** and **127** are connected to the free ends of shoulder strap assemblies **120**. and **121** respectively. A conventional hook **124** is sewn to left back band **122** and an eye **125** is sewn to right back band **123**. When the brassiere of FIG. **7** is worn, rings **126** and **127** are placed over eye **125** and hook **124** is connected thereto. When hook **124** and eye **125** are disengaged, rings **126** and **127** simultaneously are released, freeing straps **120** and **121**.

FIGS. **9** to **12** show an alternative method and hardware for fastening shoulder strap assemblies **132** and **133** to back bands **130** and **131**. In FIG. **9** an eye **135** is passed through a ring **137** made of metal, plastic, cloth or some other suitable material that has been sewn to back band **130**. In a similar manner hook **134** employing an 'anti-snag feature **138**' is passed through a ring **136** sewn to back band **131** and then hook **134** is fastened to eye **135**. Rings **136** and **137** provide similar function as cloth loops **110** and **111** of FIGS. **1**A–**6**.

FIG. **13** shows yet an alternative arrangement where a hook **146** and an eye **147** are sewn to back bands **140** and **141** respectively. Rings **144** and **145** are then attached to shoulder strap assemblies **142** and **143** respectively.

FIGS. **14, 15**A, **15**B, and **15**C illustrate yet another means of constructing the Fall-Away Brassiere. In FIG. **14**, two shoulder strap assemblies **150** and **151** are connected at. one end to the top of their respective breast receptor cups **115** and **116** by rings **104** and **105**. Shoulder strap clips **152** and **153** are attached to the free end of each shoulder strap assembly **150** and **151**. Back bands **160** and **161** are conventional back bands found on commercially available rear release brassieres. A hook **162** is sewn to back band **160** and an eye **163** is sewn to back band **161**. Latch boxes **154** and **155** are sewn to back band **160** and **161** respectively through flanges **156** and **157**. Protrusions **164** are molded into the wall of latch box **154** and **155** as shown in FIG. **15**B. Protrusions **164** are used to secure shoulder strap clips **152** until back bands **160** and **161** are fastened together. Slide dogs **158** and **159** are then sewn to their respective back bands **160** and **161** at flanges **158**' and **159**' as illustrated in FIG. **14**.

FIGS. **16**A and **16**B illustrate a front-opening Fall-Away Brassiere similar to the rear-opening brassiere shown in FIG. **14**. In FIGS. **16**A and **16**B shoulder strap assemblies **150** and **151** are connected at one end to the top of their respective breast receptor cups **166** and **167** by rings **104** and **105**. Shoulder strap clips **152** and **153** are attached to the free end of each shoulder strap assembly **150** and **151**. Back band **165** is a conventional elastic back band found on commercially available front-opening brassieres. A hook **162** and an eye **163** are sewn to juxtaposed central portions of breast receptor cups **166** and **167**. Latch boxes **154** and **155** are sewn to back band **165** through flanges **156** and **157** respectively. Slide dogs **158** and **159** are sewn to back band **165** as illustrated in FIGS. **16**A and **16**B.

FIGS. **17**A and **17**B show the preferred embodiment of the front-opening Fall-Away Brassiere where both the back band and shoulder straps release in the front. In FIG. **17**A shoulder strap assemblies **170** and **171** are sewn to a back band **180** in the rear. Shoulder strap assembly **171** has a shoulder strap slit **181** (see FIG. **17**B) near its free end. Breast receptor cups **174** and **175** are sewn to either end of back band **180**. An eye **176** is sewn to breast receptor cup **174**. A hook **177** is sewn to breast receptor cup **175**. Shoulder strap rings **178** and **179** are attached to the free ends of shoulder straps **170** and **171** respectively.

FIGS. **18**A, **18**B and **19**A to **19**E illustrate a front-opening Fall-Away Brassiere with a remote-release mechanism **200**. Two shoulder strap assemblies **190** and **191** are sewn to a back band **198**. Two shoulder strap clips **192** and **193** are connected to the free ends of shoulder strap assemblies **190** and **191**. Breast receptor cups **196** and **197** are sewn to either end of back band **198**. A hook **162** is sewn to the front of breast receptor cup **197**. An eye **163** is sewn to the front of breast receptor cup **196**. Remote-release mechanism **200** is comprised of a latch box **194** sewn to the front of breast receptor cup **196**, a flexible tube **202** made of plastic or some other semi-rigid material, and a cord **199**. Latch box **194**, seen in detail in FIGS. **19**A–**19**E, is comprised of a wedge **204**, a spring **203**, a catch **205** and a protrusion **206**. Wedge **204** is attached to one end of cord **199**. The other end of cord **199** is attached to the elastic portion of back band **198**. In a like manner, a latch box **195** is attached to breast receptor cup **197**.

DETAILED OPERATION OF THE PREFERRED EMBODIMENTS OF THE INVENTION

FIGS. **1**A, **1**B, **2**A, **2**B, **3**, **4**, **5**, and **6**

The preferred embodiment of the rear-opening Fall-Away Brassiere is illustrated in FIG. **1**A (unfastened view) and FIG. **1**B (fastened view). To don the brassiere, the wearer laces shoulder strap assembly **102** through loop **108**. Low-

snag hook **100** is then slid part way through cloth loop **110**. In a like manner shoulder strap assembly **103** is laced through cloth loop **109**. Low-snag eye **101** is then slid part way through cloth loop **111**, **112**, or **113** depending on the desired size. The wearer then slides the brassiere around her back and fastens low-snag hook **100** to low-snag eye **101**. The brassiere is now securely fastened around the back of the wearer. Shoulder strap assemblies **102** and **103** are then slid onto the shoulders.

Alternatively, the wearer may elect to cross shoulder strap assemblies **102** and **103** in back as shown in FIG. **6**. Such an arrangement is common when wearing a sleeveless dress, since it helps keep shoulder strap assemblies **102** and **103** on the shoulder of the wearer. To wear the Fall-Away Brassiere with the shoulder strap assemblies crossed, low-snag hook **100** is now slid through cloth loop **109** and cloth loops **111**, **112**, or **113**. Low-snag eye **101** is slid through cloth loop **108** and cloth loop **110**.

The advantage of the Fall-Away Brassiere is apparent when the wearer wishes to remove the brassiere without having to first remove outer garments. To remove the Fall-Away Brassiere shown in FIGS. **1**A to **6**, the wearer reaches up under her blouse and unfastens low-snag hook **100** from low-snag eye **101**. Back bands **106** and **107** are immediately released and shoulder strap assemblies **102** and **103** are free to slide out of their respective cloth loops **108** and **109**; thus allowing the brassiere to fall away from the body of the wearer. The wearer can then slide the brassiere out from under her blouse.

FIGS. **7** and **8**

An alternative version of a rear-opening Fall-Away Brassiere is shown in FIGS. **7** and **8** whereby shoulder strap assemblies **120** and **121** are connected directly to the center of the back bands **122** and **123**. The advantages of this design over the design illustrated in FIGS. **1**A and **1**B is the ease with which the wear can don this version of the Fall-Away Brassiere. The wearer first slips eye **125** through rings **127** and **126**. Next she slides the brassiere around her waist and fastens hook **124** to eye **125**, securing shoulder strap assemblies **120** and **121** to back bands **122** and **123** at a common point. Shoulder strap assemblies **120** and **121** are then slid onto the shoulders.

The Fall-Away Brassiere shown in FIG. **7** is removed in a similar manner to the Fall-Away Brassiere in FIGS. **1**A and **1**B. The wearer reaches up under her blouse and unfastens hook **124** from eye **125**. Shoulder straps **120** and **121** are immediately released and are free to slide off the wearer's shoulders; thus allowing the brassiere to fall away from the body of the wearer. The wearer can then slide the brassiere out from under her blouse.

FIGS. **9** to **12**

FIG. **9** illustrates a version of the invention that operates in the same manner as the brassiere described in FIGS. **1**A and **1**B. The differences are in the details of the fastener design and the materials used for the fasteners. FIG. **9** shows the use of rings **136** and **137** in place of the cloth loops **110**, **111**, **112**, and **113** shown in FIG. **1**A. An additional difference is the use of hook **134** with the anti-snag feature **138** in place of low-snag hook **100** and low-snag eye **101**.

FIG. **13**

The brassiere closure of FIG. **13** differs slightly from that of FIG. **9** in that hook **146** and eye **147** are sewn to back bands **140** and **141** respectively. Rings **144** and **145** are then attached to the free ends of shoulder strap assemblies **142** and **143** respectively. To don the brassiere, eye **147** is slid through ring **145**. Hook **146** is slid through ring **144** and fastened to eye **147** securing the brassiere around the wearer.

To remove the brassiere, the wearer unfastens hook **146** from eye **147**. Rings **144** and **145** are then free to slide off hook **146** and eye **147** respectively; thus releasing the shoulder straps so the brassiere can be readily removed.

FIGS. **14**, **15**A, **15**B, **15**C, **16**A, **16**B

To don the Fall-Away Brassiere in FIG. **14**, the wearer inserts shoulder strap clips **152** and **153** into latch boxes **154** and **155** respectively. Shoulder strap clips **152** and **153** are pushed past protrusions **164** shown in FIG. **15**B, temporarily holding shoulder strap assemblies **150** and **151** in place while the wearer fastens the back bands **160** and **161**. around her back. Once back bands **160** and **161** are fastened together, the elastic in the back bands stretches and pulls slide dogs **158** and **159** into a closed position shown in FIG. **15**B. The wearer then slips shoulder strap assemblies **150** and **151** onto her shoulders, causing shoulder strap clips **152** and **153** to pull past protrusions **164**. At this point shoulder strap clips **152** and **153** are secured by slide dogs **158** and **159** as shown in FIG. **15**C.

To remove the brassiere, the wearer unfastens hook **162** from eye **163**. When the tension in back hands **160** and **161** is released, slide dogs **158** and **159** are forced into the open position by the elastic in the back bands. Shoulder strap clips **152** and **153** are free to slide out of their respective latch boxes **154** and **155**. The brassiere is then free to 'fall-away' from the wear's body.

The Fall-Away Brassiere illustrated in FIGS. **16**A and **16**B operates in a similar manner to the embodiment shown in FIG. **14**. The difference is that FIG. **14** shows a rear-opening brassiere while the brassiere illustrated in FIGS. **16**A and **16**B is a front-opening brassiere.

FIGS. **17**A and **17**B

To don the front-opening Fall-Away Brassiere shown in FIGS. **17**A and **17**B the wearer first laces shoulder strap assembly **171** through ring **173**. Next shoulder strap assembly **170** is laced through ring **172**. The wearer then slides back band **180** around her back and slides shoulder strap assembly **170** through shoulder strap slit **181**. Eye **176** is then passed through shoulder strap rings **179** and **178** and attached to hook **177**; thus securing the brassiere. Shoulder strap assemblies **170** and **171** are then slipped onto the wear's shoulders.

Like all the previous Fall-Away Brassieres disclosed herein, this one can also be removed without having to first remove any outer garments. To remove the Fall-Away Brassiere shown in FIGS. **17**A and **17**B, the wearer reaches up under the front of her blouse and unfastens hook **177** from eye **176**. Shoulder strap rings **178** and **179** are free to slide off hook **176** and through rings **172** and **173** respectively, thus allowing the brassiere to fall away from the body of the wearer. The wearer can then slide the brassiere out from under her blouse.

FIGS. **18**A, **18**B, **19**A, **19**B, **19**C, **19**D, **19**E

To don the front-opening Fall-Away Brassiere illustrated in FIGS. **18**A and **18**B, the wearer first inserts shoulder strap clip **192** into latch box **194**. Shoulder strap clip **192** is held temporarily in place by protrusion **206** as illustrated in FIG. **19**B. In a similar manner, shoulder strap clip **193** is inserted into latch box **195**. The wearer now slips the brassiere on like a vest and fastens hook **162** into eye **163** with the back band around her back. This tensioning of the back band causes cord **199** to pull wedge **204** down, compressing spring **203** and forcing catch **205** out of its relaxed position into the closed position as illustrated in FIG. **19**C. The wearer now slips shoulder strap assemblies **190** and **191** onto her shoulders, causing shoulder strap clips **192** and **193** to move past protrusion **206** and be held securely only by catch **205** as illustrated in FIG. **19**D.

To remove the Fall-Away Brassiere shown in FIGS. **18**A and **18**B, the wearer reaches up under the front of her blouse and unfastens hook **162** from eye **163** thereby releasing the tension in the back band. Cord **199** is no longer under tension and can no longer hold wedge **204** in the down position. Spring **203** pushes wedge **204** up, allowing catch **205** to return to the released position as illustrated in FIG. **19**E. Shoulder strap clips **192** and **193** are free to slide out of latch boxes **194** and **195** respectively; thus allowing the brassiere to fall away from the body of the wearer. The wearer can then slide the brassiere out from under her blouse.

Thus the reader can see that the Fall-Away Brassiere described in the above specification provides a full-support brassiere that offers the convenience of removal previously available only in strapless brassieres. Furthermore, the Fall-Away Brassiere has the additional advantages in that:

(a) it provides full support for the breasts through the use of shoulder straps, avoiding the need for underwires;

(b) it allows the wearer the option of removing the brassiere without the need to first remove the dress or blouse;

(c) it permits the wearer to selectively cross the straps in back when wearing a sleeveless top;

(d) it employs fasteners that fasten and unfasten in a conventional manner; and

(e) it requires relatively few design modifications in comparison to commercially available brassieres.

While my above description contains many features, these should not be construed as limitations on the scope of the invention, but rather as an exemplification of preferred embodiments thereof Many other variations are possible. For example, the fasteners can be made of many different materials such as steel, brass, plastic, VELCRO®, etc. and can take many different shapes to prevent snagging. Low-snag hook **100** and low-snag eye **101**, illustrated in FIGS. **5** and **6**, are meant to show just one method of fastening the brassiere and not an attempt to show all the countless possible variations. Cloth loops **108**, **109**, **110**, **111**, **112**, and **113** can be made of steel, plastic, or any other suitable material; can be attached at many different locations on the back bands; and can be attached to the back bands using numerous methods such as snaps, buttons, glue, stitching, rivets, etc. Furthermore, it is not necessary that cloth loops **108** and **109** span back bands **106** and **107** as shown in FIGS. **1**A and **1**B. Cloth loops **108** and **109** can be connected only to the top edge of back bands **106** and **107**; however, the function and operation remains unchanged.

Accordingly, the scope of the invention should be determined not by the embodiments illustrated, but by the appended claims and their legal equivalents.

What is claimed is:

1. A fall-away brassiere, comprising:

(a) a first breast receptor cup;

(b) a first back band portion connected to an outer edge of the first breast receptor cup,

(c) a second breast receptor cup connected at an inner edge thereof to an inner edge of the first breast receptor cup;

(d) a second back band portion connected to an outer edge of the second breast receptor cup;

(e) a first strap connected at a front end thereof to an upper edge of the first breast receptor cup;

(f) a second strap connected at a front end thereof to an upper edge of the second breast receptor cup;

(g) a first loop connected to the first back band portion and being configured to receive the first strap therethrough;

(h) a second loop connected to the second back band portion and being configured to receive the second strap therethrough;

(i) a first connector connected to a back end of the first strap; and

(j) a second connector connected to a back end of the second strap and being configured to releasably engage the first connector.

2. The fall-away brassiere as described in claim **1**, wherein the first connector is a hook and the second connector is an eye.

3. The fall-away brassiere as described in claim **1**, wherein the first strap is passed through the first loop and the second strap is passed through the second loop when the brassiere is worn.

4. The fall-away brassiere as described in claim **1**, wherein the first strap is passed through the second loop and the second strap is passed through the first loop when the brassiere is worn.

5. The fall-away brassiere as described in claim **1**, wherein the first and second loops are connected to the first and second back portions at positions distal from a juncture between the first and second back portions and further comprising a third loop positioned on the first back portion adjacent the juncture and a fourth loop positioned on the second back portion adjacent the juncture.

6. The fall-away brassiere as described in claim **5**, wherein the hook and the eye are each connected to a respective strap and a narrow end and the first and second loops are sized to allow the hook and the eye to pass completely therethrough and the third and fourth loops are sized to allow a narrow end to pass and to prevent a wide end of the hook and eye from passing therethrough.

7. The fall-away brassiere as described in claim **5**, further comprising a rigid member assembled to each back band adjacent each of the first, second, third, and fourth loops.

8. A fall-away brassiere, comprising:

(a) a first breast receptor cup;

(b) a first back band portion connected to an outer edge of the first breast receptor cup;

(c) a second breast receptor cup connected at an inner edge thereof to an inner edge of the first breast receptor cup;

(d) a second back band portion connected to an outer edge of the second breast receptor cup;

(e) a first strap connected at a front end thereof to an upper edge of the first breast receptor cup;

(f) a second strap connected at a front end thereof to an upper edge of the second breast receptor cup;

(g) a first connector ring connected to a back end of the first strap;

(h) a second connector ring connected to a back end of the second strap;

(i) a hook attached to the first back portion;

(j) a loop attached to the second back portion and adapted to be engaged by the hook; and

(k) wherein the first and second connector rings are configured to be entrained on the hook and eye when engaged.

9. A fall-away brassiere, comprising:

(a) a first breast receptor cup;

(b) a back band portion connected at a first end thereof to an outer edge of the first breast receptor cup;

(c) a second breast receptor cup connected at an outer end thereof to a second end of the back band portion;

(d) a first strap connected at a back end thereof to an upper edge of the back band portion;

(e) a second strap connected at a back end thereof to an upper edge of the back band portion;

(f) a first connector ring connected to a front end of the first strap;

(g) a second connector ring connected to a front end of the second strap;

(h) a hook attached to the first breast receptor cup;

(i) a loop attached to the second breast receptor cup and adapted to be engaged by the hook; and

(j) wherein the first and second connector rings are configured to be entrained on the hook and eye when engaged.

10. A brassiere comprising:

a pair of breast receptor cups;

a back band attached to each of the breast receptor cups;

a pair of shoulder straps, each shoulder strap having a first end and a second end, wherein one of either the first end or second end is attached to either the back band or one of the pair of breast receptor cups; and

a releasable clasp connecting the pair of shoulder straps to the back band or the pair of breast receptor cups so that when the releasable clasp is released, the back band or pair of breast receptor cups, and at least one end of each of the shoulder straps are simultaneously released.

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